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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/820,543	04/08/2004	Deshitha Airawana Edirisuriya	1171/40711A/127A-CIP	8375
279 7590 12/03/2008 TREXLER, BUSHNELL, GIANGIORGI, BLACKSTONE & MARR, LTD. 105 WEST ADAMS STREET SUITE 3600 CHICAGO, IL 60603			EXAMINER WOLLSCHLAGER, JEFFREY MICHAEL	
			ART UNIT 1791	PAPER NUMBER
			MAIL DATE 12/03/2008	DELIVERY MODE PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

# Office Action Summary

**Application No.**

10/820,543

**Applicant(s)**

EDIRISURIYA ET AL.

**Examiner**

JEFFREY WOLLSCHLAGER

**Art Unit**

1791

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 23 October 2008.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 6-14 is/are pending in the application.
- 4a) Of the above claim(s) 14 is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 6-13 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-946)
- 3) ☐ Information Disclosure Statement(s) (PTO/SG/US)  
Paper No(s)/Mail Date \_\_\_\_\_
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date \_\_\_\_\_
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: \_\_\_\_\_

## **DETAILED ACTION**

### ***Continued Examination Under 37 CFR 1.114***

A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on October 23, 2008 has been entered.

### ***Election/Restrictions***

Newly submitted claim 14 is directed to an invention that is independent or distinct from the invention originally claimed for the following reasons: New claim 14 is a product by process claim (see MPEP 2113). The product can be made by another and materially different process such as a process that performs the injection molding steps simultaneously or by a process that attaches a preformed rubber cuff to the conduit prior to forming the connector.

Since applicant has received an action on the merits for the originally presented invention, this invention has been constructively elected by original presentation for prosecution on the merits. Accordingly, claim 14 is withdrawn from consideration as being directed to a non-elected invention. See 37 CFR 1.142(b) and MPEP § 821.03.

### ***Response to Amendment***

Applicant's amendment to the claims filed October 23, 2008 has been entered. Claim 6 is currently amended. Claims 11-13 are new. Claim 14 is withdrawn from further consideration. Claims 1-5 have been canceled. Claims 6-13 are under examination.

***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

Claims 6-10, 12 and 13 are rejected under 35 U.S.C. 103(a) as being unpatentable over Vohrer (DE 202 11 150; published September 26, 2002).

All citations to Vohrer in the rejection are from the US equivalent patent document US 6,971,414

Regarding claims 6 and 7, Vohrer teaches a method of forming a connector/coupling on the end of a flexible conduit (13) comprising injecting a threaded portion/cuff of polyester elastomer (16) onto the conduit adjacent to the end of the conduit wherein the threaded portion/cuff (16) is attached/blended to the flexible conduit (13). Vohrer also teaches injecting the connector/coupling (15) with the same material used to form element (16) (Figure 2; col. 5, lines 3-8; col. 6, lines 20-60). The examiner notes that the inner surface of the connector/coupling (15) is integrally attached to the threaded portion/cuff (16) and the polyurethane (3) coated metal hose (2).

As to claims 8 and 9, Vohrer employs a helically wound metal hose that is electrically conductive and the metal hose is covered with a polyurethane jacket/bead (col. 5, lines 48-67).

As to claim 10, the inner threaded portion (16) formed by Vohrer extends from the connector (15) (Figure 2).

As to claim 12, Vohrer employs the same claimed steps with the same claimed materials. As such, it implicitly follows that the same claimed effects and physical properties would result from the practice of Vohrer's method.

As to claim 13, Vohrer teaches the same sealing configuration (Figures 1 and 2).

Claims 6-13 are rejected under 35 U.S.C. 103(a) as being unpatentable over Carlson et al. (US 3,963,856) in view of Kleykamp et al. (US 3,779,846) and Edirisuriya et al. (US 2003/0236015).

Regarding claims 6 and 7, Carlson et al. teach a method of forming a flexible plastic tubing have a conductive helical bead wherein the helical bead is extruded onto the plastic tubing and is flattened at the end section to form a flattened end portion/cuff/sleeve to accommodate a fitting/connector (Figure 1 (16); Abstract; col. 4, lines 1-63). The examiner notes that to the extent the term "injection molding" is defined and set forth in the instant disclosure the extruded molten helical bead is reasonably understood to be "injected" and "molded" onto the conduit. Carlson et al. do not teach the helical bead is a rubber material or that the connector/fitting is injection molded onto the flattened end. However, Kleykamp et al. teach that in the analogous art helical coatings for tubes are known to consist of rubber coating conductive materials (e.g. wire) (Abstract; col. 2, lines 3-8) and Edirisuriya et al. teach a method wherein the connector is injection molded to the end of the conduit (Figure 18 and Figure 22).

Therefore it would have been *prima facie* obvious to one having ordinary skill in the art at the time of the claimed invention to have modified the teaching of Carlson et al. and to have employed a rubber material as the helical bead as suggested by Kleykamp et al. since Kleykamp et al. teach that rubber coated conductive helical beads are an equivalent alternative material known in the analogous art of forming flexible conduits and to have injection molded the connector/fitting as suggested by Edirisuriya et al. since Edirisuriya et al. suggest such a method forms a strong attachment between the conduit and the connector/fitting.

As to claims 8 and 9, Carlson et al. wrap the conduit with a helical conductor that is covered with a bead (Figure 1).

As to claim 10, Carlson suggests the flattened portion extends from the connector (Figure 10).

As to claim 11, both Kleykamp et al. and Edirisuriya et al. suggest a variety of materials may be employed to form a cuff and connector. One having ordinary skill would have readily determined the specific type of polymeric materials to employ for the flattened end portion and the injection molded connector.

As to claim 12, the combination employs the same claimed steps in the same claimed manner. As such it follows that the same claimed effects and physical properties would be achieved.

As to claim 13, the combination suggests forming a connector on the end of a conduit having the claimed sealing arrangement.

### ***Response to Arguments***

Applicant's arguments filed October 23, 2008 regarding the section 102 rejection over Vohrer have been fully considered, but they are moot in view of the amendment to the claims.

However, the examiner submits that claims 6-10, 12 and 13 are now rendered obvious over the teaching of Vohrer. It is noted that the sequence of performing process steps has been held to be *prima facie* obvious absent a showing of new or unexpected results (MPEP 2144.04 IV C).

Applicant argues that the examiner has not presented an articulation why one would combine the cited references to arrive at the claimed invention. This argument is not persuasive. Carlson et al. teach a process for applying a conductive helical bead onto a flexible plastic tubing and flattening the bead to accommodate a fitting/connector. Kleykamp et al. is combined with Carlson et al. to show that conductive helical beads in the flexible plastic tubing art are known to consist of rubber coated wires. As such, a rubber coated wire is an art recognized equivalent known to be suitable for providing a conductive helical bead on a flexible plastic tube (MPEP 2144.0—2144.07). Further, Carlson et al. generally teach a fitting/connector but provide no specific teaching of how to form it. Edirisuriya et al. teach forming a fitting/connector on the end of a flexible plastic tube by injection molding and further suggest such a method forms a strong attachment. As such, the examiner submits that a *prima facie* case has been established and that a reason to combine the references has been articulated.

### ***Conclusion***

Any inquiry concerning this communication or earlier communications from the examiner should be directed to JEFFREY WOLLSCHLAGER whose telephone number is (571)272-8937. The examiner can normally be reached on Monday - Thursday 6:45 - 4:15, alternating Fridays.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Christina Johnson can be reached on 571-272-1176. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Jeff Wollschlager/  
Examiner, Art Unit 1791

December 4, 2008